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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,104

01/26/2006

Kazufumi Mizusawa

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EXAMINER

KONG, SZE-HON

ART UNIT

PAPER NUMBER

3661

NOTIFICATION DATE

DELIVERY MODE

12/14/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@pearne.com  
dchervenak@pearne.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,104	<b>Applicant(s)</b> MIZUSAWA, KAZUFUMI	
	<b>Examiner</b> SZE-HON KONG	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 9/9/2009 have been fully considered but they are not persuasive.

On pages 2-3 of the Applicant's Response, Applicant argues Kakinami does not teach values of adjusting data of said locus data with respect to all of other steering angles are calculated based upon a value of adjusting data with respect to a typical steering angle because the adjusting data taught by Kakinami have no relation to steering angle and neither cited reference discloses a data table.

The Examiner respectfully disagrees with the Applicant. Kakinami discloses calculating the display locus for the parking assist device based on steering angle and in particular from the neutral point of the steering angle (col. 5, lines 4-19). The claim at present cites "based upon a value of adjusting data of said locus data with respect to a typical steering angle... during said setting operation..." Kakinami further describes calibrating the camera, during a setting operation, while the vehicle is being parked at a set or predetermined position, where the vehicle moved forward or rearward into a calibration setting, the camera is adjusted and the adjusted data is stored (col. 5, lines 49-67 and col. 10, lines 15-23). It is obvious during this calibration operation, the vehicle is at a position having a steering angle and this obvious steering angle would be zero, with the vehicle straightened, after the vehicle move forward or backward into the

calibration setting. After calibration is completed having the adjusting data with respect to the steering angle, a typical steering angle, the adjusting amount of the locus data is incorporated into the calculation of the locus data with respect to all other steering angles. The locus data and the amount the steering rotates are directly related. In regards to the data table, Kakinami discloses the adjusting data are stored as camera parameters of the camera into storage and the adjusting parameters correct the forecasted vehicle travel path appears on the screen (col. 10, lines 15-45). Okamoto discloses storing data of the predicted vehicle route image, actual vehicle route image and vehicle image into memory with predicted vehicle route image and actual vehicle route image generated based on output of wheel speed sensor and steering angle sensor (col. 4, lines 42-49). While Okamoto does suggest a "table" type of stored data with route images and vehicle images stored based on steering angle, Kakinami calculates the forecast vehicle travel path according to known variables, for example, steering angle and wheel speed sensors, and when the adjusting data stored in the memory is incorporated into the calculation, the adjusted forecast vehicle travel path is displayed. The calculation returns determined results from the known variables, can form a set of data which, is consider a data table.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakinami (6,813,371) and Okamoto (6,587,760).

For claims 1, 4 and 6, Kakinami discloses a drive assisting apparatus for displaying an image around a vehicle, which is acquired by an on-vehicle camera, on a screen of an on-vehicle monitor (Abstract), comprising: locus display data being used to display a travel predicted locus of the vehicle corresponding to a steering angle of a steering wheel on the screen (Col. 3, lines 32-40), and said adjusting data being used to adjust a display position of the travel predicted locus on the screen based upon said locus display data (Col. 10, lines 20-23). Steering angle detecting means (2) for detecting the steering angle of the steering wheel (Fig. 1, Col. 4, lines 17-27); and drive assisting image producing means for reading out said locus data corresponding to the steering angle detected by said steering angle detecting means during a normal driving operation subsequent to a setting operation (Col. 4, lines 42-49 and col. 5, lines 5-19), for producing a drive assisting image by superimposing the travel predicted locus on the image around the vehicle based upon the locus display data and the adjusting data,

which are contained in said read locus data, and for outputting said drive assisting image to said on-vehicle monitor (Col. 10, lines 40-45). The drive assisting apparatus includes display position adjusting amount setting means for setting a value of the adjusting data (Col. 2, lines 37-48). The values of adjusting data are calculated and are with respect to steering angles (Fig. 7 and col. 5, lines 5-19 and col. 6, lines 48-67). The adjusted angle information are stored as camera parameters of the CCD camera into EEROM inside the CPU and produce forecasted vehicle travel path, locus with the adjusted data on the screen of the display (Col. 10, lines 15-23).

Kakinami does not specifically disclose a data table containing the locus data. However, it would have been obvious for one of ordinary skill in the art a data table containing the locus data would be stored in the EEROM inside the CPU to produce the display for the forecasted vehicle travel path. Okamoto discloses image data storing means for storing data of the predicted vehicle route image, actual vehicle route image, and the vehicle image generated based on outputs of the wheel speed sensor and the steering angle sensor (Col. 4, lines 41-48). It would have been obvious for one of ordinary skill in the art at the time the invention was made recognize the memories taught by Kakinami and Okamoto stores locus data for producing accurate travel predicted locus corresponding to the steering angle of the vehicle on the display.

For claim 5, Kakinami discloses said data table stores therein a plurality of different locus data sets as to a pan angle, or a roll angle as the locus data corresponding to the steering angle (Fig. 7 and col. 6, lines 48-61).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SZE-HON KONG whose telephone number is (571)270-1503. The examiner can normally be reached on 7:30AM-5PM Mon-Fri, Alt. Fri. Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/25/2009

/SZE-HON KONG/  
Examiner, Art Unit 3661

/Thomas G. Black/  
Supervisory Patent Examiner, Art Unit 3661